Daniel Ellsberg
January 23, 1991

Toward Manhattan Project II

The nuclear era should end with the Cold War. But that is not what is happening today. One phase of the nuclear age--the period of superpower arms race and hostility--has come to a close, but another phase may be about to begin: the era of nuclear proliferation.

Happily, with the ending of confrontation between NATO and the late Warsaw Pact, the danger of any crisis erupting into all-out global nuclear war has diminished drastically (though not to zero, yet, so long as both the US and several republics of the former USSR maintain massive and partly vulnerable strategic forces).

But the possible new phase may increase the likelihood of lesser but still horrific dangers: limited nuclear wars, accidents, nuclear terrorism. The overall chance of some nuclear weapons exploding on people may actually be going up.

Whether we avert that catastrophe depends upon many things, including the activities of those of us--inside and outside governments--who believe that the nuclear era should end now, that it must and can end altogether. Contrary to some, that ending is neither assured nor automatic. It will not come without major changes in the present policies of our own government.

Each of a number of such changes has a good deal of authoritative support outside the government at this time. The approach traditionally most effective would be to pick out one or two of these at a time as priority matters for lobbying, with some hope of overcoming Administration resistance. The problem is that a long-drawn-out piecemeal approach is unlikely to have much impact on the proliferation problem that is now close at hand.

If anything will do that, it is much more likely to be a dramatic and comprehensive package of coordinated changes in policies and programs, within and among current nuclear states, expressing a fundamental change in our relation to nuclear weapons. To design such a package requires informed discussion and analysis, agreement on priorities, assignment of tasks and schedules. It will take a focussed, coordinated effort of the highest urgency.

The main precedent for that kind of effort in our own country was the very one that launched the nuclear era, exactly half a century ago: the Manhattan Project, organised in 1942. The events of the late summer and fall of 1991 have created conditions that make 1992--the fiftieth anniversary of the Manhattan Project--precisely the right time to create Manhattan Project II.

The task of the second Manhattan Project would be--so far as possible and as quickly as possible--to undo the legacy of the first: to free the earth of the threat of nuclear weapons.

Just as inventing a thermonuclear fusion weapon, the H-bomb, was a goal shaping part of the effort of the Manhattan Project from the outset--almost a decade before the very feasibility of this aim was clearly established--so abolition of nuclear weapons, hardly imaginable a few years ago, should be a longer-run aim addressed by Manhattan Project II from the start.

But that goal would in any case be approached in stages, and long before any consensus is reached on the feasibility or preconditions of total nuclear abolition, very substantial progress is both attainable and necessary in averting proliferation and reducing decisively the risk of nuclear explosions.

The need for these achievements--and for reaping immediate possibilities of massive disarmament--should give a sense of urgency to a new Manhattan Project as great as inspired the original one fifty years ago. Then the time pressure came from the prospect of a German bomb. Now it is, in part, the prospect of bombs in the hands of a host of new countries, or even smaller groups.

For some countries, even before the breakup of the Soviet Union, that deadline had recently come to seem no more than one to several years away. UN inspections in Iraq last summer had revealed that their own secret efforts and a covert traffic in technology had brought Iraq and perhaps some other nations--North Korea, Iran, Algeria, like Israel, India and Pakistan--much closer to a bomb capability than had been realized.

Indeed, what has been uncovered in Iraq is an effort of the scale, determination, ingenuity and urgency--using multiple approaches in parallel--of our own original bomb project. It is becoming clear that the alternative to an effective Manhattan Project II may be a profusion throughout the world of successful reproductions of Manhattan Project I.

Now, in the months since this was discovered, there has emerged the possibility of a metastasizing abroad from the former Soviet Union of nuclear technology, materials, perhaps finished weapons, almost certainly nuclear expertise, because of the erosion of centralized authority and discipline in the former Soviet empire, potentially extending to the nuclear complex. That could transform, within months, the environment of international decisionmaking on the acquisition of nuclear weapons.

The nuclear option might soon come to seem much more feasible--cheaper, easier, quicker, safer--than before, not only for countries that have already secretly pursuing it but for others who may consider coming into the race, including terrorist or other non-governmental groups.

Meanwhile, US policies continue to shape the international environment in ways that encourage proliferation: long-term selective tolerance for some "covert" national weapons programs (turning a blind eye to programs in Israel, India, South Africa, and until last year, Pakistan and Iraq); continuing to insist on our own right to threaten first-use; maintaining a massive arsenal and "modernizing" it, resisting deep cuts and continuing nuclear testing.

All these expressions of our own need and right to rely on nuclear weapons--despite our wealth and power, and in the absence now of any serious military threats to our national security--encourages potential nuclear states to look toward nuclear weapons as the US and its allies always have: as having vital, multiple legitimate uses as well as being unparallelled symbols of sovereignty and status.

Most dangerously, they are led by past and present American behavior to see these foreseeable uses as including threats of first-use: either issued by themselves, thereby substituting nuclear readiness for more costly conventional forces (as the US led NATO to do); or against themselves, compelling them to enter a nuclear arms race--likewise mimicking past superpower folly--to be able to deter or preempt nuclear attack. As with new Manhattan Project I's, this is a history that does not deserve repeating.

To discourage others from following our own past and current example--precisely the prospect that magnifies the dangers associated with the age of proliferation--it will never be enough to try to close all technical access to acquisition. Manhattan Project II must also define and help bring about necessary changes in all these official US attitudes and policies.

There is a positive reason for urgency that is just as important. The ending of the Cold War, and the initial antinuclear allergy of the leaders and publics of the successor regimes to the Soviet Union, have created a totally unprecedented opportunity for collaboration by major nuclear states on achieving quick and radical reductions--in some cases, elimination--of their own nuclear arsenals, thus leading the way toward global nuclear disarmament.

The intensity of desire in Ukraine, for example, to be a nuclear-free zone--after the experience of Chernobyl--is unparalleled in a state now possessing nuclear weapons on its territory. There could be no better chance than with this partner to institute internationally supervised procedures of registration, safe storage, total disarmament, dismantling and disposal of radioactive warheads and materials.

But with national pride also surging freshly, Ukraine--like Russia, North Korea and other nuclear states--still looks for reciprocity from the US in inspection, monitoring and disarmament. Yet that reciprocal openness and constraint--no real cost at all to the US with the ending of the Cold War--is not at all forthcoming from the Bush Administration at this crucial time (before Ukrainian attitudes shift, and before--we can only hope--nuclear materials, warheads or experts have escaped existing controls). That is one example of what must change, and fast.

The original project designed and delivered a bomb in about three years. Difficult as that problem was, the task of Manhattan Project II is even more complex. Just one facet of it--the technical scientific, engineering and logistical problems of dealing with radioactive waste from dismantled warheads and from the cleanup of the entire nuclear complex--calls for the coordinated talents of physicists, chemists, and other physical scientists and engineers on a scale reminiscent of the original project. (This would be a worthy basis for the conversion of the various national weapons labs, competing with the lure of covert weapons weapons programs).

But that is only one part of the overall problem of cleaning up the international consequences of Manhattan Project I. Devising practical solutions and programs for freeing the world of the danger of nuclear threats and ridding it of most or all of its nuclear weapons has many more varied dimensions than the original project--political and psychological, as well as physical---and faces even more obstacles. It is the very complexity and interdisciplinary nature of these tasks, along with their importance and urgency, that suggests the model of the Manhattan Project in the first place.

In contrast to the original, the new project would be need to be international and non-secretive. Ideally, it would be a high-priority project of governments from the start. But while the major republics of the former USSR seem now to share a commitment to the goals described above, that is not at all true of the present US Administration. Therefore while some countries might collaborate in the effort at a high governmental level, such a project in the US would have to be organized initially outside government.

That means--regrettably, in view of the urgency--that while there is more than enough expertise outside government for the conceptual and planning phase of Manhattan Project II, the project would not be operational and managerial from the outset like the one fifty years ago. One of the major questions it would have to address would be how to bring about societal and Executive branch understanding of and consensus on its goals and programs.

To gain presidential and bureaucratic commitment to massive global nuclear disarmament and effective opposition to proliferation--including willingness to offer the kinds of US reciprocity that both of these will require--will take more, this time, than the equivalent of an Einstein-Szilard letter to FDR.

There is no time to lose.

The following proposed schedule of successive targets--with one-year, three-year and end-of-decade deadlines--exemplifies the kind of planning the new project should produce.

Within one year from now, the US Government should unilaterally end the production of fissionable materials, adopt a no-first-use constraint, cut the START ceiling on strategic weapons at least by half--and preferably to a total of 1000 warheads or less--and eliminate MIRVd land-based warheads and silo-busting warheads like the W-88 warhead for the Trident II missile, ending production of the latter.

Making these decisions promptly would make it unnecessary to reopen costly and dangerously polluting production facilities for warheads at Rocky Flats, tritium at Savannah River or fissionable materials elsewhere. (Cutting START levels in half is included as a short-run interim option precisely because it would have this effect on tritium and fissionable materials production, and because it should command quick consensus and decision; from any other point of view, it leaves far too many weapons in place. No later than 1995 there should be US and Commonwealth commitments to ceilings lower by at least two-thirds and preferably much more.)

Since these very steps were proposed on a bilateral basis by President Gorbachev on October 5, 1991, with the concurrence of republican leaders, there is every reason to expect that they would promptly be matched by the Commonwealth of Independent States.

Furthermore, the US Government should either join the Commonwealth in a moratorium on nuclear testing, or commit itself to completing a limited number of tests--perhaps ten to twenty--for purposes of safety and reliability by 1995, followed by permanent suspension of testing. (An international expert panel of Manhattan Project II could aim at an early, authoritative recommendation on whether or how many such tests were necessary).

The US should offer funding from the US defense budget this year for the registering and tagging, as quickly as possible, of all nuclear weapons in the Commonwealth--proposing this for all nuclear weapons in the world, including US--and for the safe storage and handling of all weapons to be dismantled, on both sides. As an urgent measure of essential reciprocity during this first year of the project, US facilities should be made open to the same international verification and monitoring procedures for the disarmament and dismantling process that are demanded of the Commonwealth and other nuclear states.

The three-year period of the original project suggests the next target date; it would bring us to 1995, the fiftieth anniversary of the Alamagordo test and Hiroshima, the first demonstrations of nuclear destruction.

1995 should be the deadline for achieving solid commitments on the part of all the nuclear states of the world to:

--the principle of no-first-use, the rejection of nuclear weapons as an instrument of policy or warfare;

--abolition of tactical nuclear weapons, with total destruction of them by the year 2000;

--ending of nuclear testing and production of fissile material, no later than 1995;

--adherence to the provisions of the Anti-ballistic Missile Treaty, narrowly interpreted;

--near-abolition of strategic weapons (95% or more reduction from present superpower levels, low ceilings and abandonment of MIRVing in other states) by 2000;

--and along with all other nations, adherence to a strengthened anti-proliferation regime and the Non-Proliferation Treaty, including, at last, its disarmament aims.

These commitments would express an attitude toward nuclear weapons--admitting no legitimate use for them other than, for a relatively few devices, the deterrence of nuclear attack--that is a drastic departure from current doctrines of the US and several other nuclear states.

With the rejection of any military "war-fighting" or preemptive "damage-limiting" function or first-use role, such devices (as Morton H. Halperin has long urged) should be separated organizationally and physically from regular military commands, no longer to be incorporated into regular military planning or deployed with regular military forces.

From another aspect, this new way of thinking means coming to see the existence of nuclear stockpiles beyond the lowest minimal deterrent level in any country as a problem, akin to global warming, that needs to be dealt with cooperatively by humanity as a whole.

We should regard the many "excess" weapons now existing in virtually every nuclear state (even those with the smallest stockpiles) essentially as toxic, explosive, hazardous waste. The policy problem with respect to these objects should be not how to deploy and make use of them, diplomatically or militarily, but how to store them safely before eliminating them, under international inspection.

Only if we ourselves, in the US, act determinedly and consistently on such a conceptualization can we really ask other countries to forgo nuclear weapons altogether, or expect effective international collaboration on enforcement. We cannot hope for this so long as we continue to test new nuclear warheads, maintain grossly excessive arsenals, and insist on our freedom to initiate nuclear warfare.

We need to change our way of thinking not only in order to fight proliferation but also to free resources we urgently need. With the end of the Cold War the possibility opens before us of a drastic and comprehensive reduction in the arms budgets of all the nations of the world--starting with the United States and the nations of the new Commonwealth--and the diversion of the vast resources now locked up in our defense budgets to meeting human needs ranging from hunger, development and education to infrastructure and problems of the environment.

There is growing support for the proposal to reduce our defense budget by 50 percent by the end of the century. But why should it take most of a decade to eliminate just that portion of our budget designed to address the Warsaw Pact!

There is every justification for cutting the defense budget by more than half at the end of the Cold War as quickly as we demobilized after World War II--that is to say, in a year or two. Doing that by 1995 instead of five years later would free funds that would otherwise be wasted on the order of half a trillion dollars.

Accompanying the commitments above on nuclear policy, major programmatic efforts should already be underway by 1995 toward their realization, which should be complete by the third target date, the year 2000.

That would mean substantially ending the era of nuclear threats with the millenium. And it would give realistic hope to the further objective of ridding the earth altogether of nuclear weapons.